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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,290	07/15/2003	Helmut Meyer	22610	7719

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EXAMINER

EWALD, MARIA VERONICA

ART UNIT PAPER NUMBER

1722

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,290

Applicant(s)

MEYER, HELMUT

Examiner

Maria Veronica D. Ewald

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/15/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schott, Jr. in view of Yamamoto, et al. Schott, Jr. teaches a guide assembly for air-expanded thermoplastic tubes with a structural ring (column 3, line 6, item 36 – figure 5) that supports a stub shaft on which is attached an elongated arm. This reads on a calibrating basket through which the blown extruded thermoplastic synthetic resin film tube passes. At the end of the elongated arm is a carrying guide member that can be adjusted to increase the circle size (column 3, lines 33 – 34, item 20 – figure 8). The guide member comprises an elongated spindle upon which a series of short rollers is disposed to engage the exterior of the extruded tube (column 2, lines 62 – 64). This reads on guide stirrups, each having a multiplicity of tube-contacting film-guide rollers. Schott, Jr., however, does not teach that the rollers are supported on the respective stirrup with a roller bearing.

In a method for extending the useful life of a bearing under corrosive conditions or where clean conditions are required, Yamamoto, et al. teaches a roller bearing capable of maintaining lubricity for long periods of time. The roller bearing consists of an

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outer ring, an inner ring and rolling elements disposed between the rings (column 10, lines 22 –24). This reads on said roller bearings comprises an inner ring fixed to the outer ring coaxial with the inner ring and forming the respective roller, and an array of roller bodies between the inner and outer rings. Yamamoto, et al. further teaches that the rolling elements are balls and that one of the inner and outer ring is made of one of the following materials: melt-moldable fluoro-resin, a resin composition comprising the melt-moldable fluoro-resin as a main ingredient and a resin composition in which a fibrous filler and/or solid lubricant is added to a melt moldable heat resistant resin (column 2, lines 34 – 39). This reads on the applicant's claim that the roller bodies are balls and that one of said rings is composed of a synthetic resin.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the guide assembly of Schott, Jr. to incorporate the roller bearing configuration of Yamamoto, et al. for the purpose of maintaining lubrication, reducing friction and minimizing contamination of any parts or components contacted by the roller bearing assembly as taught by Yamamoto, et al. (column 3, lines 10 and 46 – 47).

14. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schott, Jr. in view of Yamamoto, et al. as applied to claims 1 - 4 above, and further in view of Kondoh, et al. Schott, Jr. and Yamamoto, et al. teach the characteristics previously described, but neither teaches the use of an antiadhesion coating on the surface of said outer ring.

In a method for maintaining the lubricity of roller bearings and ensuring that the roller bearings produce little dust, Kondoh, et al. teach a roller bearing in which the outer and inner rings are coated with a solid lubricating film of polytetrafluoroethylene (PTFE) (column 2, lines 15 – 16). This reads on the outer surface of outer ring with an antiadhesion coating thereon. The reference teaches that the application of PTFE on the surface of the rings as well as the roller ball itself ensures a low dust production rate of the bearing so that particles do not adhere to components coming in contact with the bearing itself. It also ensures that the frictional resistance remains low, developing superior lubrication performance (column 1, lines 59 – 60).

It would have been obvious at the time of the invention to one of ordinary skill in the art to coat the rings of Yamamoto, et al. with the PTFE solid lubricant of Kondoh, et al. to maintain a high level of lubrication and low dust production so that frictional resistance is low and to ensure that components passing through the guide assembly are not contaminated with any bearing dust produced.

15. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schott, Jr. in view of Yamamoto, et al. as applied to claims 1 – 4 above, and further in view of Planeta. Schott, Jr. and Yamamoto, et al. teach the characteristics previously described, but do not teach that the rollers have gaps between them.

In a method to extrude a thin plastic tube, Planeta teaches a collapsible frame assembly with the rollers mounted side-by-side to provide a substantially continuous surface of engagement with the tube (column 1, lines 38 – 39). The reference further

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teaches that the rollers are mounted on a common axle and are rearwardly inclined to the direction of travel of the tube (column 3, line 10 and figures 4 – 5). Furthermore, figures 4 – 5 both show small gaps between each roller. This reads on a gap, as described by the applicant, provided between neighboring rollers on each stirrup.

It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the guide assembly of Schott, Jr. and Yamamoto, et al. to maintain a slight gap between rollers as shown by Planeta to ensure that the rollers provide a continuous surface of contact with the blown tube.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


BENJAMIN L. UTECH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).
